Fig. 1

CENTRAL PROCESSING UNIT 4

TCP/IP NETWORK 18

NETWORK INTERFACE UNIT 20

INPUT/OUTPUT CONTROLLER 22

SYSTEM MEMORY 6

RANDOM ACCESS MEMORY 8

READ ONLY MEMORY 10

12

MASS STORAGE DEVICE 14

OPERATING SYSTEM 16

APPLICATION PROGRAM 205

WORD PROCESSOR 220

CALENDARING PROGRAM 225

DOCUMENT 230

E-MAIL PROGRAM 26

2

200

FILE	EDIT	VIEW	ETC	

FROM	SUBJECT	RECEIVED
JOHN DOE	MEETING	12/20/03
MARY SMITH	PROPOSAL	12/22/03

210

205

HI BILL   *230*

240   جملة اللّغة العربيّة هنا .](ARABIC LANGUAGE)

ENGLISH LANGUAGE SENTENCE HERE.

MIXED CONTENT   الجملة هنا .] (ARABIC LANGUAGE)

250

220

Fig. 2

200

FILE	EDIT	VIEW	ETC

FROM	SUBJECT	RECEIVED
JOHN DOE	MEETING	12/20/03
MARY SMITH	PROPOSAL	12/22/03

210

205

HI BILL

جملة اللّغة العربية هنا . (ARABIC LANGUAGE)

230

ENGLISH LANGUAGE SENTENCE HERE.

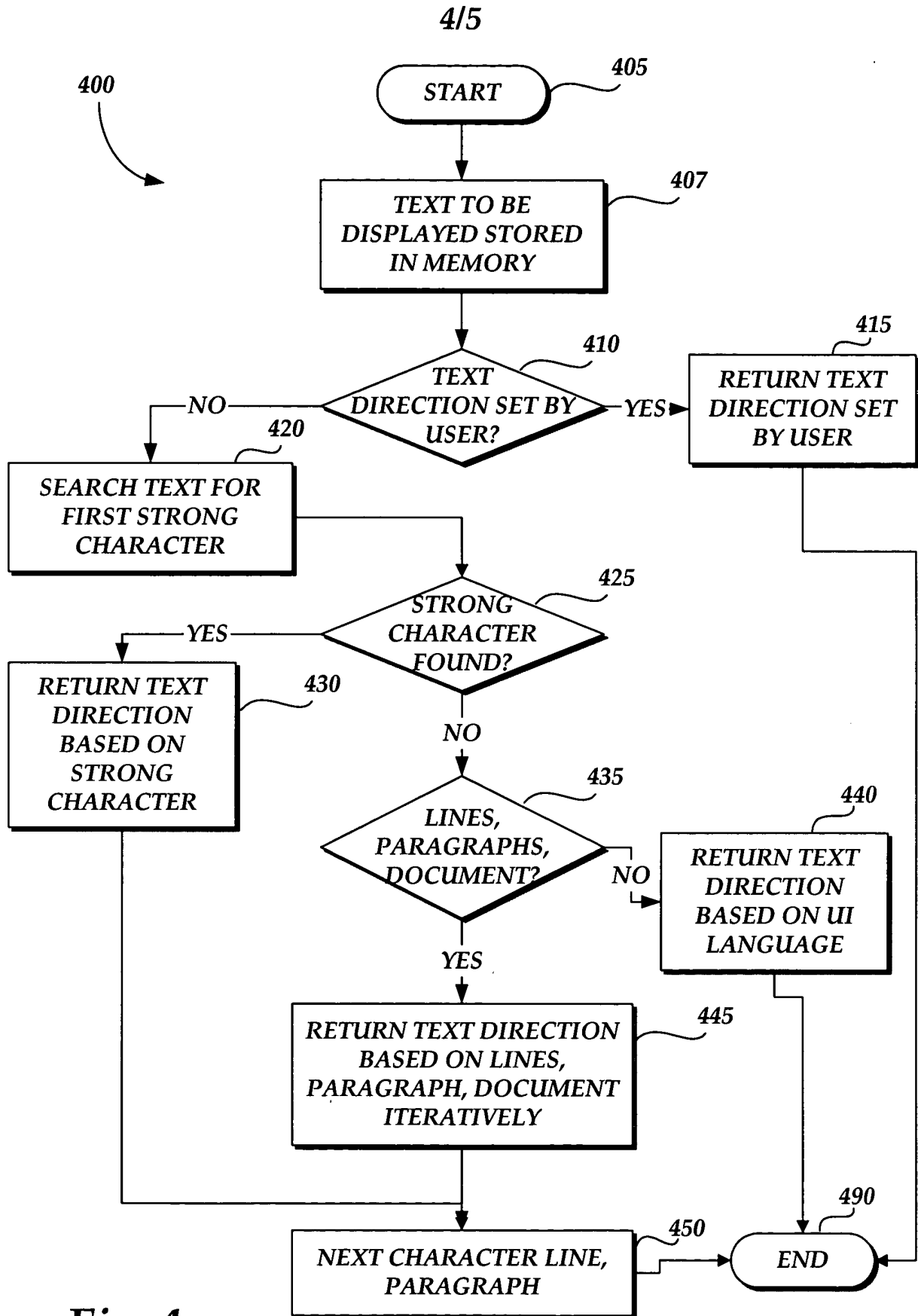240

MIXED CONTENT الجملة هنا . (ARABIC LANGUAGE)
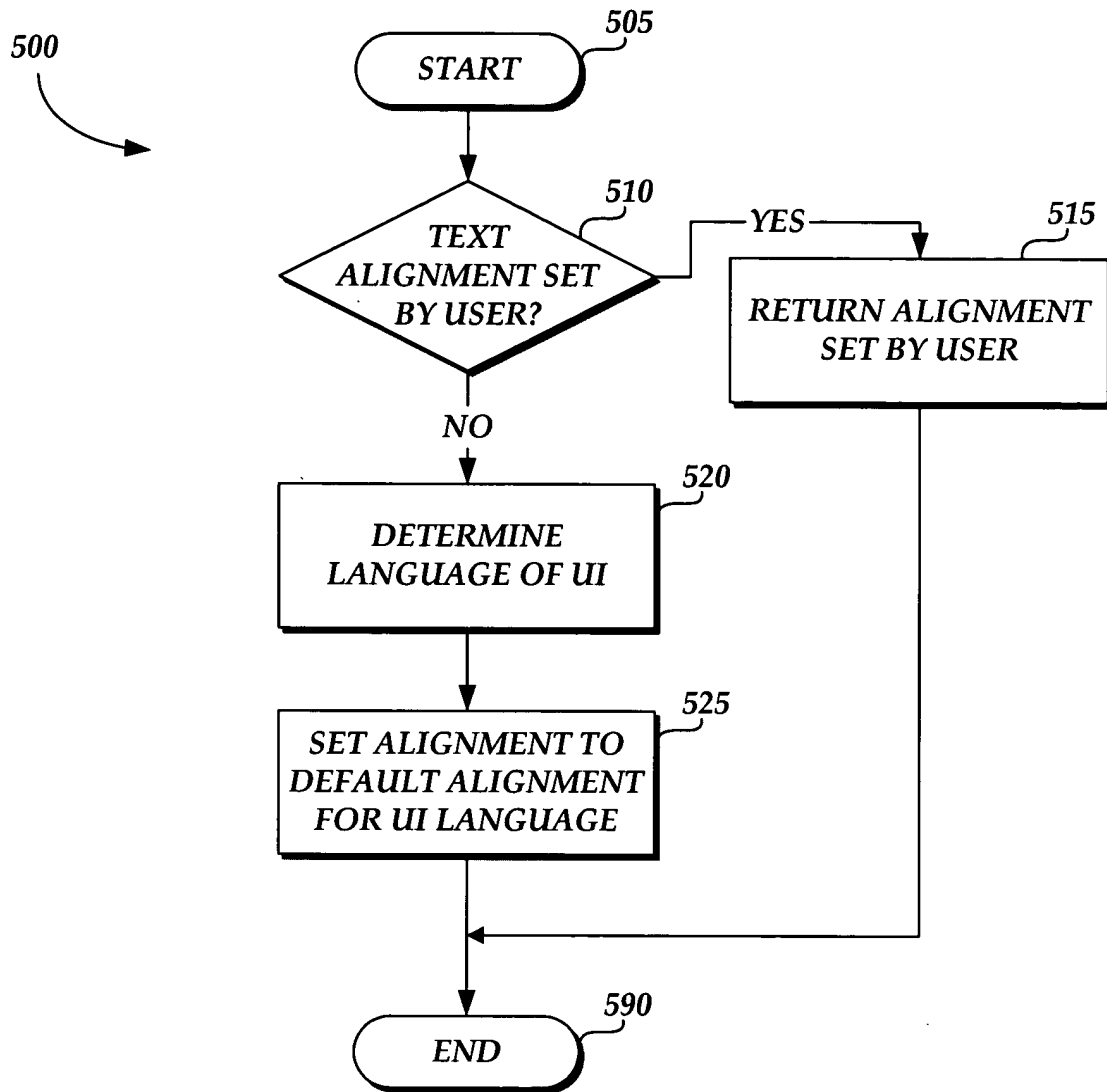
250

220

Fig. 3

400

START — *405*

TEXT TO BE DISPLAYED STORED IN MEMORY — *407*

TEXT DIRECTION SET BY USER? — *410*

RETURN TEXT DIRECTION SET BY USER — *415*

—NO—

—YES—

SEARCH TEXT FOR FIRST STRONG CHARACTER — *420*

STRONG CHARACTER FOUND? — *425*

—YES—

RETURN TEXT DIRECTION BASED ON STRONG CHARACTER — *430*

NO

LINES, PARAGRAPHS, DOCUMENT? — *435*

NO

RETURN TEXT DIRECTION BASED ON UI LANGUAGE — *440*

YES

RETURN TEXT DIRECTION BASED ON LINES, PARAGRAPH, DOCUMENT ITERATIVELY — *445*

NEXT CHARACTER LINE, PARAGRAPH — *450*

END — *490*

Fig. 4

500

505
START

510
TEXT
ALIGNMENT SET
BY USER?

YES

515
RETURN ALIGNMENT
SET BY USER

NO

520
DETERMINE
LANGUAGE OF UI

525
SET ALIGNMENT TO
DEFAULT ALIGNMENT
FOR UI LANGUAGE

590
END

Fig. 5